

the apex of the costal cell picked out in black for over half its length; a similar, though not quite so heavy a line, forms the apex of the brachial (fig. 1). Membrane suffused with pale brown. *Abdomen* with first six segments deep black, tip of abdomen pale. *Legs* milky-white.

Length 4 mm.

Bedford Park, Middlesex (*Dr. C. J. Gahan*); on Sycamore.

Eupteryx stellulata Burm.

Burmeister, Gen. Ins. (1838) p. 16, fig. 1.

Ivory-white, with a faint bluish tinge. *Elytra* with a conspicuous, brown brand on the apical half; subcostal with much, suprabrachial and tip of brachial, light brown, the nervures smoky; subapical area somewhat darker brown; a very dark triangular patch at the extreme apex, with a not quite so dense a

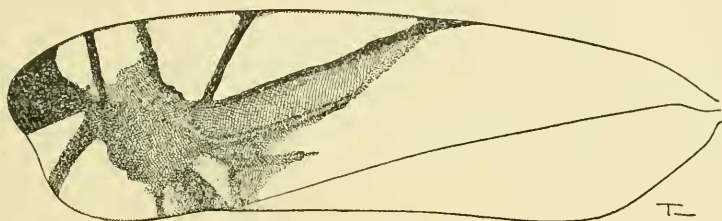


Fig. 2.—*Eupteryx stellulata* Burm.

patch in the region of the last apical cell; across the white sinuses made by the brand run dark-brown lines (fig. 2). *Wings* white, suffused with brown at the apex. *Abdomen* black-brown, with a little yellow showing towards the tip. *Legs* white; anterior tarsi yellowish; tips of hind tibiae brownish. *Claws* brown.

Length 4–4½ mm.

Bedford Park, Middlesex (*Dr. C. J. Gahan*), forming food of larvae of *Crabro gonager*. Kew Gardens, Surrey (*F. Laing*); on *Prunus* spp.

British Museum (Nat. Hist.), S.W. 7.

August 1920.

A NEW BLASTOPHAGINE GENUS AND SPECIES FROM E. AFRICA
(HYMENOPTERA-CHALCIDOIDEA).

BY JAMES WATERSTON, B.D., B.Sc., F.E.S.

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There have recently been placed in my hands, through the courtesy of the Director of the Imperial Bureau of Entomology, London, several tubes of Chalcids in spirit. Mr. A. Loveridge, who forwarded the

material to the Bureau, states (*in lit.* 5.vii.19) that the tubes were recovered by himself from the floor of a building at Movogoro after the place had been occupied by our troops.

From the material so fortunately preserved several new species will shortly be described, but in the present paper I wish only to bring forward the following peculiar and very distinct Fig-Insect.

Fam. AGAONIDAE.

Subfam. AGAONINAE.

ALFONSIELLA, gen. nov.

Head normal for the group; not remarkably longer than broad; antennae 11-jointed. Scape triangularly produced ventrally; pedicel without appressed pointed scale-like sensoria: third joint simple, apically bluntly rounded; sensoria of funicular joints short, in a subapical whorl, each giving rise to a long curved tubular process; the joints themselves largely membranous towards the apex beyond the sensorial ring. Mandibles bidentate, not fused with the appendage, which is narrow and stout; its transverse ridges not minutely denticulate. Pronotum entire. Wings with the postmarginal short and obsolescent; and the radius nearly rectangular to the costa. Abdominal sternites shortly excised postero-medianly, except the 7th, which is nearly divided; ovipositor long.

Genotype, *A. fimbriata*, sp. n.

The condition of the postmarginal at once separates this genus from any other group of African *Agaoninae*, except *Allotrioazon* Grandi (2 spp.). From the latter it may be known by (*a*) the peculiar sensoria on the funicle, (*b*) the mandibular dentition and simpler structure of the appendage, (*c*) the labial chaetotaxy, and (*d*) inclination of the radius. Its relationship to *Eiseniella* Ashm. (1906), *Pegoscapus* Cam. (1906), and *Valentinella* Grandi (1919)—all neotropical—is also close and apparent; but in all these the pedicel is armed with numerous sharp reflexed sensoria, the 3rd joint is complex (*i. e.* with pointed and articulated appendage), and the funicle of the normal Blastophagine type.

Superficially *Alfonsiella* is very like *Agaon* Dalm., but a more particular examination shows its affinities lie, on the whole, with *Blastophaga* Grav. *sens. str.*

Alfonsiella fimbriata, sp. n.

♂. Unknown.

♀. A light-coloured species (but see below). Head darker than any other part of the body, blackish-brown in colour; pedicel, scape, and legs lightest in tone and concolorous. Funicle hardly darker. Thorax and abdomen intermediate in colour between the legs and head, the tergites darker slightly than the sternites. Sheath of the ovipositor nearly as dark as the

head. At the base of each fore wing is a very dark spot low down on the axilla, and (in mounted examples) a similar spot occurs (internally) at the base of the ovipositor.

Head.—Longer than broad; across the eyes 10:9, at the mouth edge 2:1. The eyes extend over $\frac{5}{8}$ of the depth (length) and are quite bare. Antenna (figs. 1, *a*) length .7–.8 mm. Mandibles distinctly obtusely angled on the outer edge, just behind one-half from the apical tooth to the outer basal angle. Two teeth, one apical and rather long, the other subapical and inconspicuous; 6–8 ridges ventrally, 8–9 bristles along the outer anterior edge and 1 on the

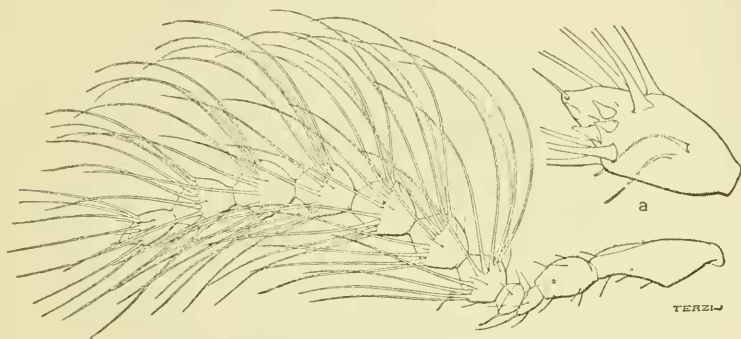


Fig. 1.—Antenna of *Alfonsiella fimbriata* Waterst. *a*, last funicular joint.

inner edge, about $\frac{1}{2}$. Appendage narrow (not half as broad as the mandible), stout, rod-like, with 14–15 short hook-like ridges. Trophi: stipes 2 short bristles along the edge (1 at $\frac{2}{3}$, 1 at $\frac{1}{3}$ from the base). No apical lateral splint or trace of palpus. Galea 2 bristles; labium 2 bristles.

Thorax.—Pronotum deeply and broadly angularly incised posteriorly, with a stronger linear parabolic incrassation of the chitin before the posterior edge; anteriorly broadly truncate. Surface reticulated only medianly and at the extreme sides, anteriorly, with about 50 (25:25) bristles. Mesonotum only a little ($\frac{1}{4}$) longer than the scutellum. Parapsides 4–5 bristles. Mesophragma $\frac{1}{3}$ longer than the scutellum. Mesosternum with 6–8 (3–4:3–4) hyaline spines of moderate length anteriorly, and 10–12 bristles in two irregular approximated rows (5–6:5–6) about the mid-line, and 1–2 other bristles less definitely placed on each side. Metanotum narrowly reticulate medianly, otherwise smooth; metapleurae bare. Propodeon in two smooth oblong sclerites, divided by a linear membranous area. Spiracle narrow, elongate, a little wider at both ends, with 10 bristles behind.

Wings.—Fore wings: length 1.4 mm., breadth .6 mm. The neuration extends to about .6 mm. from the radix. Submarginal: marginal: radius; approximately in ratio 4:1:1; the postmarginal ends indefinitely, but is only about $\frac{1}{3}$ of the radius at the point where it fades out. On the submarginal are 3 bristles (one at $\frac{1}{4}$ and another at $\frac{3}{4}$ from the base, and the third at its junction with the costa); a fourth longer bristle stands on the costa above the origin of the radius. Submarginal cell proximally bare: on distal half with scattered minute bristles, and 12–15 longer at the edge. Surface of wing densely clothed except for a narrow, clear hyaline tract, parallel with the hind

margin, extending from the radix to about the length of the submarginal vein. Hind wings: length .75 mm., breadth .14 mm. Neuration reaching the middle of the wing.

Legs.—Fore leg: femur half as long again as coxa. Tibia not quite half (4:9) the femur. Along the inner (anterior) ventral half of the surface of the tibia six of the bristles (none of which are on the edge) are stouter; 3-4 bristles along the ventral edge. Apical ventral angle produced into a short tooth; upper apical angle posteriorly with bidentate process—the lower tooth curved and longer. Anteriorly along the middle of the 1st tarsal joint are 3 short stout bristles, and one at the anteroventral angle. Joints 2-4 bear anteriorly 1 similar bristle at the ventral angle, and another above at the middle of the apical suture. Tarsal joints in ratio 3:2:2:2:5. Mid leg: the first tarsal joint is about $\frac{1}{3}$ longer than the 2nd. Hind leg: coxa as long as femur, and both $\frac{1}{3}$ longer than the tibia, which bears posteriorly 5-6 spinose and 3-4 thinner bristles. Tarsal joints in ratio 42:27:23:15:36. In all five joints the postero-ventral edge is broadened out and the thin chitin deeply frayed, giving the whole tarsus a feathered appearance.

Abdomen.—Tergites 1-4 are medianly salient and shortly notched posteriorly. Tergite 5 is entire, but there is a clear unchitinized line from the middle of the hind margin, reaching anteriorly to about $\frac{1}{3}$. Tergite 6 is deeply angularly emarginate posteriorly, and nearly divided into two quadrilateral sclerites, which are connected only by a narrow, almost linear, part of the membrane of the segment. Spiracle moderate, suboval, and somewhat angled antero-ventrally. Each sclerite bears 16-20 bristles. The setigerous process (stylet) is much longer (5:3) than broad. It is bluntly and broadly truncate, and bears three of the usual four hairs in a transverse apical row; the fourth is placed on the ventral edge. Ovipositor: measured along the ventral edge the abdomen and the ovipositor are of equal length. The 5th sternite vomeriform in profile, its elongate apex reaching the tip of the stylet, or just beyond.

Length (body) 1.8 mm., alar expanse 3.3 mm. Length of ovipositor .8 mm.

Type, ♀, in B. M.

One of a series of ♀♀ collected in East Africa, Dar-es-Salaam, August 1914 (*A. Dampf*).

Note.—The light colour of the material on which this description is based may be due, in part, to fading in alcohol, in which the specimens have been for nearly six years. The specific name refers to the fringed appearance of the hind tarsus.

July 1920.

BOMBYLIUS MINOR L. AND SOME OTHER PARASITES OR
INQUILINES OF COLLETES DAVIESANA SM.

BY K. G. BLAIR, B.Sc., F.E.S.

In June of last year Mr. Hugh Main obtained from a sand-pit near Shanklin, I.W., the pseudochrysalis of a Meloïd beetle, which in the autumn produced *Meloë brevicollis*. Being myself at Shanklin in April,